

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

LIBRARY,
U. S. Department of Agriculture
Washington, D. C.

GUIDE TO PANSY CULTURE

AND CATALOGUE OF
Premium American Pansy Seeds

✻ GROWN BY ✻

WILLIAM TOOLE

Pansy Specialist

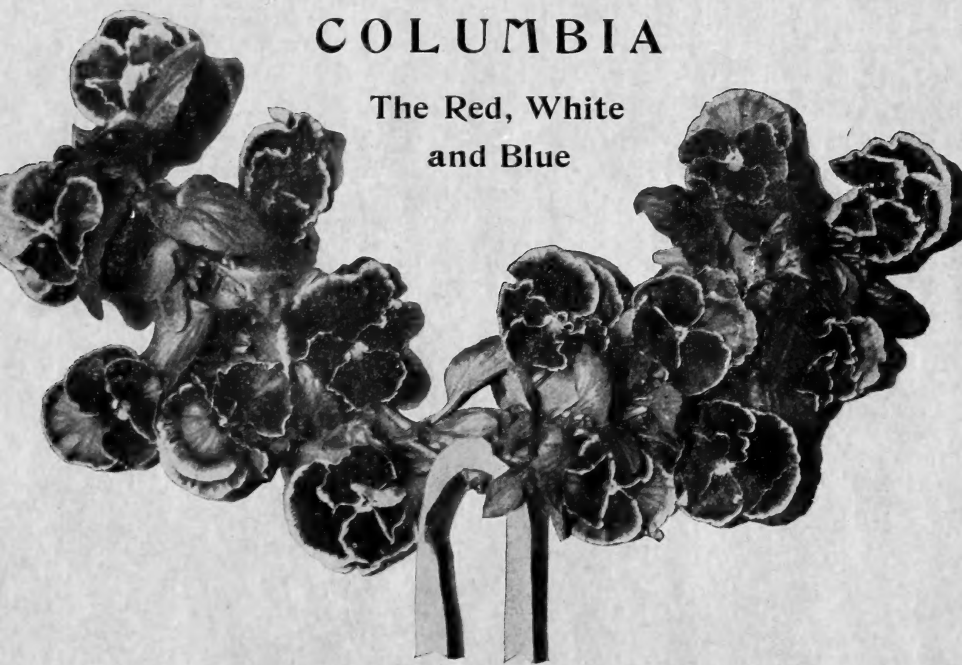
Pansy Heights

Baraboo, Wis.

1905

COLUMBIA

The Red, White
and Blue



Our Yearly Greeting to Customers.

Our Premium American Pansy Seeds have another year proved their superior adaptation to the American climate, over those of foreign breeding, and we will continue to hold the advantage we have gained for our American breeding of pansies. That our pansies thrive and yield fine flowers, in seasons when imported seeds have suffered more from adverse weather conditions, has been proved in our own experience and that of many customers.

That our friends who have never visited our pansy fields may have some idea of how we grow them a cut has been prepared, which is copied from a photograph, showing a portion of the field as it appeared the 23d of last October, and will be found on last page of cover.

Come and see the pansies any time after the middle of August. Our grounds are less than two miles from the Baraboo railway depot.

I offer pansy seeds only of our own growing. Of other seeds some are grown here and others are procured from wherever the best are to be had. Attention is called to our two new varieties of pansies, Eiderdown and Cyclone. The former is the forerunner of a new class of pansies. The delicate fringing of the edges is quite pronounced, yet each year will bring out this feature in a more marked degree.

I again thank our many friends for recommending our seeds and plants to others. A large part of our increase in business comes from the good words spoken of our pansies by those who have grown them.

Hoping for continued good will from flower lovers I wish all a "Happy New Year."

WILLIAM TOOLE, Pansy Specialist,

Pansy Heights

Baraboo, Wis.

How to Grow Pansies.

Pansies are not deeply rooting plants, therefore they must be furnished rich soil, and not allowed to become very dry, but the fertility must be such as can be used at once, and not consist of coarse fresh manure and the moist condition of soil must not run to the extreme of continued wetness.

They are natives of Western Europe where the climate does not run to such extremes of temperature as ours, and they do best in cool growing weather, consequently our best flowers are to be had in spring or late summer and fall.

From southern Illinois northward, if but one sowing is made, most satisfaction may be derived from planting out of doors early in spring. These plants will bloom from midsummer until snow flies and, if properly cared for, give the earliest flowers in spring and an abundance of bloom until summer heat has drawn the branches out so long that they had better give way to younger plants.

South of the latitude above mentioned, it is better to depend on spring flowers from plants started in late summer and early fall, or from seeds planted in the greenhouse or house in January.

Pansies commence to flower in from seventy to eighty days from the time of sowing, under reasonably favorable conditions, and my customers in the extreme south and on the Pacific coast will thus see that with fall sowing they may have a long period of flowering before summer heat commences.

In the latitude of northern Illinois and Wisconsin, seeds for plants to winter over should not be planted later than the first of September. If plants are desired for winter blooming sow late in July. Flowers can be had nearly as early from plants started in the greenhouse from middle of January to middle of February, but in the house it would be better not to plant earlier than March, for it is necessary to give the young plants room as they grow, planting out in shallow boxes before they become drawn and slender. If seeds are sown out of doors just before winter sets in, they will come up early in spring and be in flower before July.

Sowing Seeds

The same care is required in sowing pansies as for other small seeds. They must not be covered too deeply, nor be permitted to dry after they have commenced to germinate, for a dried plant is dead no matter how small it is.

Pansy seed should be sown thinly in shallow furrows not more than one-sixteenth of an inch deep, made with the sharpened edge of a piece of lath. The seed-bed should be mellow and rich,

leveled smooth before the seeds are sown, and after sowing the seeds should be covered evenly, and the surface pressed with a piece of board. The seed-bed should be watered and shaded until the young plants are up, after which they should be gradually accustomed to full light. Shade for the seed-bed may be secured by laying over some kind of frame about a foot from the ground, laths or pieces of sheeting.

As soon as the plants are up the shading must be gradually removed as there is always danger of "damping off" with any kind of small plants in close, warm and damp situations. Too high temperature in the seed-bed is fatal to pansy seeds, and those planted in midsummer will not germinate strongly if the thermometer in the shade ranges for a long time above 75 degrees. If the seeds are permitted to dry after they have sprouted, their vitality is gone. If covered too deeply they cannot come up.

Where to Grow Pansies

In the house or greenhouse in winter, if young plants are had just commenced to flower late in the fall, if they are not kept too hot and dry and are protected from green fly and red spider. Old plants which have done service in the garden are not suitable for winter blooming. Several plants in a box are better than if grown in earthen pots. On the balcony, porch or window sill in summer, if not directly facing the south. Grown in this way no plant better repays the care given. In the garden anywhere, if not in too hot a place, directly facing the south; nor where they must struggle with larger plants and trees for nourishment.

General Management

The plants which have flowered in the spring will do well again in the fall if the long branches are cut back late in June.

The ability of the pansy to stand hot weather depends greatly on its treatment. If the soil is rich enough, and not too dry, nor in too hot a situation, pansies, with frequent cultivation, will stand a long siege of hot weather, if no seeds are allowed to form. With this care one can have pansies from young plants in midsummer. A rich, sandy loam is best for pansies, and if not too stiff, a clay soil is better than that which is very sandy. But whatever its texture, the soil should be made rich with well-rotted manure, thoroughly incorporated with the soil, and stirred several times while the plants are in the seed-bed. This thorough preparation of the soil before transplanting is very important.

Well-rotted manure, if to be had, is preferable to commercial fertilizers.

Transplant after the plants have attained the fourth or fifth leaf and before they have become drawn and slender with crowding. An eastern and northern slope is preferable. My own experience does not permit me to favor shade, although shade is preferable to too much heat, and the shade of trees is more objectionable than the shade of buildings. Temporary shade during the hottest portion of the day in extremely warm weather would be an advantage, but shade the whole season through will not admit the brightest colors, or an abundance of flowers.

If watering is necessary and possible the ground should be well soaked in the evening and thoroughly stirred, about two inches deep, next morning, as soon as the soil is dry enough.

Cultivation without watering, is better than watering without cultivation.

Keep the buds picked off after transplanting until the plants are well established, and also during very hot weather, for a good display of flowers in the fall.

When growing where they are to stay, about eight inches to a foot square of space should be allowed each plant. Frequent stirring of the soil is necessary between the plants until they are too large.

A crust should never be permitted to form on the surface. Frequent cultivation is, more than anything else, the secret of success in pansy growing.

Winter Protection

The plants which have flowered through the summer and fall will usually winter over well if protected with a light covering of leaves or straw, which is better if a little brush has been placed over the plants first.

Young plants are quite hardy if protected from sharp winds, and not allowed to become too wet near the surface of the ground. The young plants should be transplanted from the seed-bed to winter quarters early enough to become well rooted before winter sets in.

Boards may be used instead of glass for cold frame covering; glass should be shaded if too warm, as it is desirable to keep the plants dormant, and they should be watered, if necessary, as the roots will sometimes freeze dry if not looked after.

A good way to protect pansy and other plants is to have a V trough of narrow boards to cover the plants with, and then throw on some coarse litter of leaves, straw, manure or shavings. In all cases thorough surface drainage must be provided to prevent water from accumulating about the plants and forming ice about them.

Pansy Pests

Pansies, like many other flower plants, in hot, dry weather, are liable to be injured by the so-called "Red Spider", a minute insect which attacks the under surface of the leaves of many garden and field plants, causing them to wither, as if from dryness. Spraying of water from a garden pump directed forcibly against the plant will reach the under side of the leaves and destroy the insects. The addition of pyrethrum powder or else kerosene emulsion to the water makes the remedy still more effective.

As the red spider flourishes best in a dry atmosphere, it is often the case that plants in the shade of trees suffer because heavy dews are kept from the plants by the trees. Aphis or plant lice cause more injury in gardens than people are generally aware of. Apply, in any way to wet the plant lice, a solution of one teaspoon of nicotine to two quarts of water. The same may be used on house or other plants troubled with scale or shell louse, mealy bug or red spider. Also for vermin in the hen house or on animals.

Varieties of Pansy Seeds and Prices

In the following list I continue the simple classification heretofore followed, which is briefly descriptive of kinds.

Our old customers each year recognize increased and changing variety in the markings. With careful selection and persistent rejection of anything not up to our standard of excellence we attain to the highest grade in quality. No variety of flower responds more readily to good care than does the pansy, and none are more sensitive to neglect or careless treatment. For that reason it is possible for the best strain of seed to not show its full beauty because not given a chance.

Please give ours a chance to show what they can do.

The "half tone" picture of pansies on first page of catalogue cover is copied from a photograph of our new Columbia pansies, which have been received by our customers with marked favor. Our two newest creations, Eiderdown and Cyclone, which are listed in the giant class, will surely become general favorites.

Price of pansy seeds 10c per packet except where otherwise noted.

No. A 1 Columbia—The red, white and blue. Of large size, perfect form and exquisite coloring. Probably no flower grown combines to the same extent our national colors as does our new pansy Columbia. Price per packet 20c.

No.

- 1 Deep Blue—varying from bright to very dark blue.
- 2 Blue Black Shaded—black in center, changing outward to shades of blue.
- 3 Light Blue—delicate shades of light blue or lavender.
- 4 Nos. 1, 2 and 3 mixed.
- 5 Uncle Tom—my own strain—the deepest black of pansies.
- 6 Black—violet center.
- 7 Black—bronze center.
- 8 Nos. 5, 6 and 7 mixed.
- 9 Havana Brown—attractive shades of light brown, old gold, etc.
- 10 Velvet Brown—very rich and velvet dark brown shades.
- 11 Brown and Bronze—dark mahogany shades with brown center.
- 12 Bronze—varying from light bronze to copper hue.
- 13 Nos. 9, 10, 11 and 12 with other shades of brown; mixed.
- 14 Fancy Red—reddish shades of purple from rosy to almost crimson. This variety, originating with myself, is in all respects the best red pansy.
- 15 Rose—a new variety of my own and quite distinct from any other, with light shades of pink to deep rose, and carmine purple, with rich velvety centers.
- 17 A new variety of the red flowered class of pansies being of slender, graceful form and a pleasing shade of crimson purple, with rich violet centers.
- 20 Velvet Purple—rich, dark shades of royal and purple velvet.
- 21 Nos. 14 to 20 mixed.

Marbled—beautiful combination of colors on white or yellow ground.

- 22 Marbled White Ground.

- 23 Marbled Yellow Ground.
- 25 Marbled dark.
- 26 Marbled mixed.
- 27 Cardinal—probably as near to scarlet as will be reached with pansies.
- 28 Fiery Purple—velvety scarlet purple shades with yellow.
- 29 Fire King—upper petals bright purple red, the others yellow with large center markings.
- 30 Mixture—22 to 29 inclusive.
- 31 Rosy Lilac—flowers varying from pale lilac to darker shades.
- 34 Striped Mixed—flowers beautifully and curiously marked, with lilac, bronze and yellow on purple.
- 35 Nos. 31 and 34 mixed.
- 36 Snow Queen—pure white with characteristic yellow dot in center of flower, sometimes marked near center with faint blue or purple lines.
- 37 White Penciled—much like Snow Queen with blue or purple lines near center of flowers.
- 38 White, Large Center.
- 39 White, Blue Edge.
- 40 Nos. 36 to 39 inclusive, mixed.
 Odier or Five Spotted—while other pansies have center markings only on three lower petals these marks are shown on all petals in this variety.
- 41 Odier white ground.
- 42 Odier red ground.
- 43 Odier yellow ground.
- 44 Odier mixed.
 Large Spotted—very large, rich center marking in great variety.
- 45 Large Spotted—white ground.
- 46 Large Spotted—red and white ground.
- 47 Large Spotted—red and yellow ground.
- 48 Large Spotted Mixed.
- 49 Cassier or Giant Odier—more after style of Large Spotted than Odier, but an interesting new variety.
- 50 Mixture of Odier, Large Spotted and Cassier.
- 51 Bugnot—a Giant Odier of great beauty and variety of markings. Packet 15c.
- 52 Giant Masterpiece—flowers very large; petals frilled and ruffled, some appear as if double; have Odier style of colors.
 Packet 15c.
- 53 The two preceding varieties mixed. Packet 15c.
- 54 Emperor William—blue with large dark center.
- 55 Lord Beaconsfield—dark purple shading to lavender.
- 56 Wm. Penn—a new variety, light drab, shading to brown or pearly gray.
- 57 Nos. 54 to 56 mixed.
- 58 Gloriosa Perfecta—beautiful markings with rich steel blue shading over the colors. Some with white, others with white and crimson edges.
- 59 Rainbow—much after style of Gloriosa Perfecta with an additional blending of yellow.
- 60 Black with crimson and yellow edge—Emperor Frederic.

- 61 Black with crimson and white edge—Freya.
- 62 The two preceding are very beautiful and striking. Both varieties mixed.
- 63 Purple White Edge and Silver Edge, rich purple shades with distinct white border.
- 64 Nos. 58 to 63. Fancy bordered varieties mixed. Nothing more beautiful than this class in all the varieties of pansies.
- 65 Deep Yellow—no yellow flower grown is more attractive than the deep yellow pansy.
- 66 Light Yellow—canary yellow to creamy white.
- 67 Yellow with blue or red border.
- 68 Yellow, large center.
- 69 Sunshine or Goldelsie. Pure yellow without other markings, while on a few plants the flowers are penciled with lines of black or brown near the center.
- 70 The preceding yellow varieties with No. 76 mixed.
- 71 Blue shaded with brown—interesting colors.
- 72 Veined—marking curious and beautiful.
- 73 Blue with white border.
- 74 Orchid Flowered—The flowers are of good form and size with beautiful shadings of salmon, nankeen, yellow, buff and indescribable colors. Beautiful and very interesting.
- 75 The four preceding varieties mixed.
Giant Trimardeau—The flowers and plants of this class of pansies average larger than others. They have been greatly improved in form and colors.
- 76 Giant Yellow—flowers very large, bright yellow, with black or brown velvety centers.
- 77 Giant Purple.
- 78 “ Beaconsfield.
- 79 “ Emperor.
- 80 “ Blue.
- 81 “ Black.
- 82 “ White with violet blue center; very fine.
- 83 “ Snow Queen—some larger than common Snow Queen, but not so large as Giant White.
- 84 Giant Striped.
- 85 “ Rosy Lilac and Auricula, lilac shaded with chamois and bronze.
- 86 Giant Havana Brown—old gold, fawn, russet, etc.
- 87 “ Dark Purple—violet center, very rich and striking.
- 89 “ Pencilled White—my own variety. Packet 15c.
- 90 Eiderdown—A beautiful white pansy of the giant class with flowers perfect in form and delicately fringed around the edges; of the purest white except a faint tinge of lavender near the center. Per packet 25c.
- 91 Cyclone—Has white ground flushed near center and edges with rosy lilac bordered with dark purple. Per packet 25c.
- 92 Giant Show—all of preceding Giant Trimardeau varieties mixed.
- 93 Solid colors mixture. These include but a limited range of varieties. All solid color varieties are included in this mixture. Packet 15c.
- 94 Light shades mixture. 15c.

- 95 Dark shades mixture. 15c.

All varieties and mixtures 10c per packet except as otherwise noted.

- 96 Extra choice mixed. This is my premium collection mixed.

- 97 Selected mixed. Selected from plants typical of their respective classes.

- 98 Hesperian pansies. A selection of the most beautiful varieties noticeable for large size and perfection of form and coloring intended for those who wish to grow a few of the very best; in pkg. and trade pkg. only; pkg., 25c; trade pkg., 50c; 3 trade pkts., \$1.00.

Extra choice mixed pkt., 10c.; trade pkt., 20c; $\frac{1}{8}$ oz., 50c; $\frac{1}{4}$ oz., 75c; 1 oz., \$2.75.

Selected mixed pkts., 15c; trade pkts., 30c; $\frac{1}{8}$ oz., 70c; $\frac{1}{4}$ oz., \$1.20; 1 oz., \$4.00.

Trade pkts. contain about 1000 seeds; $\frac{1}{2}$ oz. at ounce rates.

Premiums: For 50c order pkts. to value of 60c. For \$1.00 order pkts. to amount of \$1.25; for \$2.00 order to amount of \$2.60.

The above premium applies to seeds in pkts., but not to trade pkts., or seeds by weight.

The same premium is allowed for other seeds as for pansy seeds.

Pansy Plants

My trade in pansy plants is now very extensive with both amateurs and dealers. Orders will be filled promptly as early as spring opens.

Plants sent to all parts of the country, whether by express or mail, have been reported received in splendid order.

The plants when received, whether by express or mail, should be taken to the cellar, or some other cool place, and unpacked at once. The roots should then be sprinkled with water and covered with fresh soil, planting them out in the evening or early in the morning. The bed should have been prepared some time previously, the surface being stirred frequently. The plants, with watering and shading may then be safely planted even in dry weather.

Plants delivered at express office here packed to go long distances.

In bud or blossom, from selected seed, by express, 50 plants, \$1.00; 100 plants, \$1.60; 1,000 plants, \$15.00; 500 plants at 1,000 plant rates. Plants once transplanted, by mail postpaid, 25c doz.

Not less than one dozen plants by mail.

The above prices are for mixed varieties, but if many plants of any one variety are ordered, ten per cent will be added to the regular prices of such plants.

There is an advantage in club orders if sent to one person, not only by lower rates for plants, but also through proportionately less express charges if all are consigned to one person. Express rates on plants are lower than general rates.

Plants are always billed from this office at the lowest rates but sometimes agents at delivering offices advance the charges.

In club orders each person's collection will be marked separately, and some extras sent to the person making up the order.

For list of other plants see end of catalogue.

Other Flower Seeds.

Asters

The same directions given for care of pansies in seed-bed will apply to asters, except that the latter may be covered a little deeper. Seeds may be sown from the time frost leaves the ground until late in May. Plants started in May will be ready for the fall fairs. Make the soil into which they are transplanted rich, stir the surface frequently and mulch before they begin to bud.

Asters, when in bloom, should not suffer for want of water. They are fine, grown in pots for decorative purposes. When the plants are in full bloom out of doors they may be lifted with some soil about the roots and placed in a bowl or tumbler of water with a little moss in the bottom. They will thus keep in condition longer if removed to the house for decoration than they would if exposed to the weather in the garden.

With so much need for white flowers none are more useful than white asters. These, with the lighter shades of purple, blue and rose or pink, are very much used for decorative work. A choice selection of these colors, in the best varieties, has been chosen for customers.

All asters 10c per packet except as noted.

- 105 Pæonia Flowered Perfection. Flowers large, globular, free blooming, and in great variety of shades.
- 106 Pæonia Flowered, white.
- 107 Pæonia Flowered, pink.
- 108 Pæonia Flowered, light blue.
- 109 Rose Flowered. Flowers medium large, in great variety of colors, very double and free blooming, durable and satisfactory for decorative purposes.
- 110 Rose Flowered, white.
- 111 Rose Flowered, light carmine.
- 112 Rose Flowered, light violet.
- 113 Rose Flowered, scarlet, the brightest colored aster; very showy.
- 116 New Branching Aster. Flowers large, of fine form, with long stems; superior to all other asters for bouquets; mixed.
- 117 New Branching, white, pink, crimson or lavender blue, separate.
- 118 Giant Comet. Flowers large with long petals like chrysanthemums and in variety of colors; branches long.
- 119 Ostrich Feather. Much after style of Giant Comet. Flowers large in variety of colors; long stems.
- 120 Ostrich Feather, white.
- 121 Tall varieties mixed.

HALF-TALL VARIETIES

- 122 Comet. A new variety attracting much attention because

- of resemblance to Japanese Chrysanthemums, colors mixed, shades of bright pink, light rose, lilac and white striped.
- 123 Comet, white.
 - 124 Early Hohenzollern. A white aster very early of the Comet class; flowers very large for so early a variety.
 - 125 Early Express. Another very early white of the Comet class and very desirable for bouquets or decorative work.
 - 126 Queen of Earlies. Flowers medium to large size on long stems, very early and desirable. Mixed colors.
 - 127 Queen of Earlies. White, pink, light blue or crimson, separate.
 - 128 Diamond. The flowers of this variety are the largest of the pompon class, very regular in form, rivaling the dahlia in symmetry; mixed colors.
 - 131 Victoria. Flowers of good size and variety, free blooming and desirable; mixed colors.
 - 132 Victoria, white.
 - 135 Half-tall varieties mixed.

DWARF VARIETIES

- 137 Dwarf Chrysanthemum, Flowered. Plants dwarf, branching, free blooming.
- 139 Shakespeare. Plants low growing, branching and covered with very small double flowers.
- 140 Pæonia Flowered Dwarf Bouquet. More erect in style of growth than preceding dwarf varieties. Plants one mass of flowers, almost completely hiding foliage.
- 143 Dwarf Queen mixed.
- 144 Dwarf varieties mixed.

OTHER MIXTURES

To accommodate the large demand for asters for decorative work we offer for florists' use a mixture of best white with light blue and pink, or carmine shades as:

- 146 Florists' mixed.
And for the same uses we offer a mixture of the best white varieties.
 - 147 Mixed Whites.
 - 148 Mixed Dark Purples of tall and half tall classes.
 - 149 A mixture of all varieties and classes, per packet 5c.
All numbers except 149 10c per packet.
- Trade pkts. of any kind containing triple quantity at double price.

Ageratum

Plants susceptible to frost but otherwise easily grown. Flowers in clusters. Free and continuous bloomers.

- 155 Imperial Dwarf mixed. \$0 05

Alyssum

Flowers white, small, numerous and sweet scented, valuable for ribbon beds or where masses of white are wanted; blooms early and late.

- 160 Common, best for cutting. \$0 05

161 Dwarf, best for edgings..... 05

Antirrhinum

165 Or Snap Dragon—Dwarf, easily grown from seeds and
very desirable for bouquets or in the garden; mixed
colors 05

Coreopsis

169	Drummond's golden wave, clear, bright yellow, as fine for cutting as the perennial <i>Coreopsis Lanceolata</i> ..	05
170	Tall varieties mixed	05
171	Dwarf varieties mixed	05

Dianthus

Free and continuous bloomers from pure white, through rose, carmine, crimson and brightest red, to almost black; the Japan Pinks commend themselves to every one.

181	Chinensi Heddewiggi—Double mixed colors.....	05
182	Lacinintus—Double fringed, mixed.....	05
185	The preceding varietal mixed.....	05
187	Marguerite Carnations. These if sown early will bloom the same season. They are very free bloomers and more than three-fourths come double from seed, being in as great variety of colors and fragrant as the common carnations.	
	Pkt. 5c, trade pkt. 10c.	
188	Marguerite Carnations, white.....	05

Gailardia, or Blanket Flower

190 *Gailardia Lorenziana*. Double mixed, splendid plants for bedding or bouquets, easily grown, flowers large and continuous bloomers, until late in autumn. Colors—yellow, claret, maroon, brown, crimson and yellow, etc. 05

Larkspur

The flowers of both annual and perennial varieties are fine for cutting and showy in the garden; perfectly hardy and of easy culture. The perennial varieties will bloom the first season and for many years after. There is no blue flower brighter than are some of the Chinese Larkspur.

201	Chinese perennial, white or bright blue; either color separate.....	05
202	Chinese in many shades of white, blue, purple, mixed	05

Sweet Peas

The following list of sweet peas is a selection of the best free blooming varieties:

206	Emily Henderson, large, pure white.....	05
207	Blanche Burpee, one of the choicest whites.....	05
208	Blushing Beauty, delicate pink.....	05

209	Mrs. Gladstone, rosy pink, blush wings.....	05
210	Firefly, glowing scarlet.....	05
211	Mars, bright crimson	05
212	Butterfly, white-edged lavender.....	05
213	Monarch, crimson, maroon wings, purple.....	05
214	Blanche Ferry, pink and white, early.....	05
215	Mrs. Joseph Chamberlain, white stripe, pink..	05
216	Captain of Blues.....	05
217	Lottie Ecford, white-edge, blue.	05
218	Finest varieties mixed, oz. 10c; pkt. 5c.	

Nasturtiums, Dwarf

223	Lady Bird, yellow, spotted scarlet.....	05
224	Pupureum, crimson.....	05
225	Pearl, creamy white.....	05
226	Rose	05
227	King of Tom Thumbs, scarlet	05
228	Golden King, bright yellow.	05
227	Dwarf varieties, mixed.....	05

Nasturtiums, Tall

230	Crimson.....	05
231	Yellow.....	05
232	Rose.....	05
233	Scarlet.....	05
234	Orange.....	05
235	King Theodore, very dark red.....	05
236	Many tall varieties mixed.....	05

Petunia Hybrida Grandiflora

This class of flowers is so well known that they need no special description. Seeds should be sown in boxes sprinkled on the surface of the soil and pressed in. They should be carefully watered and shaded with a pane of glass, muslin or paper, or they may be covered with a woolen cloth laid directly on them; the watering being allowed to soak through the covering. As soon as the seeds have sprouted, remove the cloth, but do not let the plants dry out or keep them so close as to cause damping off. The fringed petunias are very attractive and are admired even by those who have not cared for petunias until seeing these beautiful varieties.

241	Fringed Alba, white.....	10
242	Fringed Maculata, or spotted.....	10
244	Fringed Kermesina, rich crimson maroon.....	10
245	Fringed Mixed.....	10
247	Superbissima Alba, white, 100 seeds.	10
252	Superbissima, mixed.....	10
253	Fringed and Superbissima, mixed.....	10
254	Belle Etoile, the French star petunia, crimson purple with white star center.....	10
255	Carmen Sylvia, silvery rose with white throat.....	10
254	and 255 are specially suitable for vases, window boxes, etc.	

Phlox Drummondii

One of the most showy and free blooming annuals. Seeds may be sown early with about the same care as for Asters, but like Petunias, the soil need not be so rich.

The Grandiflora varieties are strong growing with large flowers.

The Hortensifloras are compact, bushy growers, with flowers larger than the common varieties.

260	All colors mixed.....	05
261	Meteor, bright scarlet.....	05
262	White.....	05
263	Hortensiflora, white.....	05
264	Hortensiflora, rose.....	05
265	Hortensiflora, mixed.....	05
266	Grandiflora, mixed.....	05
267	Grandiflora, white.....	05
268	Grandiflora, Splendens, bright crimson with white center.....	05
270	Fringed. These have fringed edges, mixed colors....	05
271	Star and Fringed, mixed.....	05

Reseda Odorata or Mignonette

For fragrance and free blooming qualities the three following varieties are offered as the best:

272	Parson's white.....	05
273	Miles Spiral, long spikes.....	05
274	Matchet, dense compact growth.....	10
275	Mixed varieties.....	05

Stocks

For fragrance and beauty combined, the Ten Weeks Stocks are much esteemed. They should be started early in window or hot bed, but they will bloom in good season if sown as recommended for pansies. A light rich soil suits them best. Stocks, Alyssum and other plants belonging to the cabbage family suffer from attacks of the flea beetle. The plants should be dusted with a mixture of one part pyrethrum powder to forty parts land plaster. Coal ashes or dry road dust may be substituted for plaster. The Californian grown pyrethrum called Buhach is the best.

276	Large flowered, tall, Ten Weeks, mixed.....	10
277	Large flowered, dwarf, pyramidal, Ten Weeks, mixed	10
278	Perpetual flowering, white.....	10

Verbena Hybrida

Seedling Verbenas are more free blooming and fragrant than those from cuttings, and if seeds are sown in the house, may be had in bloom as early as desirable for our season. They come reasonably true to color from seeds.

284	Mammoth mixed.....	10
285	Grandiflora Auricula, flowered, mixed colors, with white eye.....	10
290	Candidissima, pure white.....	10
291	Defiance, brilliant scarlet.....	10
293	Scarlet, with white eye.....	10

Plant Department.

The selection of varieties for our plant list has been made with reference to their fitness for outdoor growing, window boxes in summer, veranda boxes, and vases without regard to their usefulness as winter houseplants also. We find that many things which formerly were classed only as greenhouse plants are fine for summer growth, either outside of the window, in the garden, or as climbers by the porch. For a summer climber there is nothing finer than *Cobea Scandens*.

Our customers often inquire about plants suitable for window boxes and vases. Selection may be made from the following: Geraniums in variety, Paris Daisy, Feverfew, *Salvia Splendens*, Cigar flower, Verbenas, Petunias single and double, Thunbergias, Lobelias, Phlox Drummondii, Double Alyssum, Montbretias, Vinca and Ageratum.

Seedling Plants in Variety

In this department we seem to supply a long felt want, and have been surprised at the great demand for seedling plants for bedding purposes. Many do not care to trouble with seed sowing, others order a few to fill vacancies, or of such varieties as they cannot start early.

These plants are all much earlier than can be started out of doors. We have increased our facilities for growing and hardening off the plants, and our large mail and express trade is steadily increasing.

Seedling Verbenas are healthier, more fragrant and free blooming than those from cuttings. Prices as follows:

Asters, in white, pink, light blue, bright red, deep purple, each color separate or in any variety in mixture as listed among such seed, per doz.....	\$0 15
Chinese Larkspur, hardy perennial, blooming the first season, mixed, per doz.....	15
Ten Weeks stocks, white, crimson or mixed, per doz.....	25
Petunia, fringed or superbissima, or both varieties mixed, per doz.....	25
<i>Salvia Splendens</i> , 5c each, per doz.....	50
<i>Cobea Scandens</i> , a rapid growing climber, with large showy flowers, blue, 5c each, per doz.....	50
Verbenas, in separate colors or varieties, as described in seed list, also pink and blue, white center, per doz..	25
English Daisies, white or pink, per doz.....	25
Marguerite Carnations. This new class of carnations has proved very satisfactory, blooming as they do the	

first season from seed, they are more thrifty and free than the old style florists' carnations and equally fragrant. A large percentage come double and some of the most choice can be potted for blooming in the house, per doz.....	30
Cosmos, late, mixed colors, per doz.....	30
Cosmos, early, mixed colors, per doz.....	30
Thunbergia. A very attractive climber suitable to droop over edge of vases or window boxes. Flowers yellow with black center, 5c each, per doz.....	50

Plants from Cuttings.

These are necessarily dearer than plants from seeds because much room is taken up in the greenhouse with stock plants of the varieties to be propagated, but if we would be sure of varieties many kinds must be increased in this way.

	Each	Doz.
Double Alyssum, new giant. This is a stronger grower than the old kind and better for cutting purposes; graceful, drooping plants.....	5c	\$0 50
Feverfew, double white	5c	50
Forget-Me-Not, <i>Heavenly blue</i> ; perfectly hardy in winter but easily lost in summer if neglected.....	5c	50
Pineapple Salvia— <i>Salvia rutilans</i> . The leaves of this salvia have a strong pineapple fragrance. Plants may be grown in pots, or potted in late summer for winter blooming. The long spikes of crimson flowers are very showy.....	5c	50
Paris Daisy—White with yellow center, a new large flowered variety more free blooming than the old kind.....	5c	50
Paris Daisy—Golden Beauty. Equal to the white in size and freedom of bloom; a clear, pure yellow. New.....	5c	50
Double Petunias—Purity. Fringed pure white. The best double white petunia.		
Kansas double white, not fringed, a wonderful free bloomer.		
Mrs. F. Sander—Pure pink, heavily fringed and very double.		
Pink Beauty—Finely fringed, a favorite.		
Lovely—Very double fringed, white with carmine and purple center.		
Marvel—White flaked with carmine.		
Stella—Carmine with white border.		
Champion—Deeply fringed, rich plum purple.		
Each 10c; 3 for 25c.		
Salvia Splendens, St. Louis and Clara Bedman; 5c each; doz.		
50c.		

Heliotrope—We have tested many varieties the past season and find some of the older varieties the most free bloomers, but some of the kinds have special qualities to recommend them. Some kinds are different only in name, and so were rejected. We offer the following as the best: Queen of Violets, very dark with white eye; Florence Nightingale and Jersey Beauty, medium shade and very free bloomers; White Lady, nearest approach to white, good grower, free bloomer; 10c each; 3 for 25c.

Geranium Rose Scented are fine for summer use if grown in the garden, and like Heliotrope should be in every outdoor collection. Either skeleton leaved or common; 10c each; 3 for 25c.

Lemon-scented, rare and delightfully fragrant; 10c each; 3 for 25c.

Lemon Verbena—*Aloysia citrodora*. Very choice in fragrance for indoors or out; 10c each; per doz. 50c.

Vinca variegata. Has drooping vine-like stems with leaves variegated white and green. Indispensable for window boxes and vases; 10c each; per doz. \$1.00.

Cuphea Platycentia—*Cigar Flower*. Always in bloom winter or summer and pretty in a window box collection; 5c each; per doz. 50c.

Lobelia—Dwarf blue with white eye, 5c each; doz. 50c.

Hanging Basket Ferns—*Nephrolepis Exaltata*. We have had wonderful success with this fern grown in a hanging basket built of sticks, log cabin fashion, and lined with sphagnum moss or anything to keep the soil from sifting through. Young plants from the old one grow through the sides, and the fronds three to four feet long on large plants are always admired. Leaf mould, with a little well rotted manure, suits them best. Our common white cedar fence posts are easily cut and split into suitable pieces for building plant baskets.

Boston Fern. This is a robust variety of *Nephrolepis Exaltata* and has become very popular; good thrifty plants in different sizes, 15c, 20c and 25c each.

Anna Foster. This new sword fern is a beauty. Very full of graceful drooping foliage. Fronds are broad, each pinnae being like a separate frond. 15c, 25c and 35c each.

Umbrella Plant - *Cyperus Alternifolius*. These favorite plants are easily grown in pots, as aquatics, or in the garden, they like plenty of moisture; thrifty young plants 5c each; larger plants 10c.

Geraniums. We have in stock thirty-two of the best varieties, mostly double, including the following:

Double Whites, Bride Bouquet, Ayne Chevalier, La Favorite, Countess Harcourt, the best of the new double whites; Mabel, brilliant dark scarlet; John Doyle, bright vermillion; S. A. Nutt, very dark vermillion; Professor Poirlaut, crimson, purple and scarlet; Marvel, very dark scarlet; Alphonse Ricard, sunproof, rich glowing scarlet.

Of pinks, salmons, flesh color, apple bloom, etc., we have Beauty of Poitvine, Queen of Fairies, Madam Gilbert, Jean Viaud, Vera Vend, Frances Perkins, Glory of France, Glory of Nancy, Louis Francais and others; singles in pure white, pink, scarlet, aureole, etc.: 10c each; 3 for 25c.

Montbretias are very free flowering with leaves, flowers and

manner of growth somewhat after style of gladiolus but smaller.

Montbretia Crocosmiflora. Flowers orange yellow and scarlet, by mail 5c each; 3 for 10c; doz. 35c; by express doz. 20c; 50 for \$1.00.

Gladiolus Bulbs

The Gladiolus increases each year in popularity as its value for house decoration is more generally recognized. If cut when the first flower opens and placed in water in the house every bud on the spike will open into good flowers. Part of the bulbs may be kept in reserve and planted for succession until middle of June.

We have a fine collection of gladiolus in splendid mixture of shades. Per 12, 40c; per 35, \$1.00. Postage paid. By express 30c per doz.; 50 for \$1.00.

Hardy Perennials

Rudbeckia Golden Glow. Double yellow. Perfectly hardy perennial; 5c each; doz. 50c.

Helianthas Multiflora. Double perennial Sunflower, very free and continuous flowers; 10c each; 3 for 25c.

Achillea. The Pearl double white, very hardy and profuse bloomer; 5c each; doz. 50c.

Pyrethrum roseum. Hardy perennial, in various shades from crimson to light pink.

Year old seedlings from choice double varieties, 5c each; doz. 50c.

Aquilegia or Columbine. Double white usually in bloom by decoration day. 5c each; doz. 50c.

Perennial Gailardia. One of the very best of hardy perennials. Flowers are large on long stems in beautiful combinations of yellow and scarlet shades. If the center of plants should winter-kill save the roots, from which young plants will spring up. 10c each; per doz. 80c.

Coreopsis lanceolata. Hardy perennial, bright golden yellow, very fine for cutting; 10c each; doz. 80c.

Perennial Larkspur. Hardy, in various shades of blue; one year plants, 5c each; doz. 50c.

General Remarks

Read what is said about care of pansy plants when received by mail or express. The same remarks apply to other plants also.

Express rates on plants are now so reasonable it is much better to have plants come that way than by mail. Larger plants can be sent by express, and we can afford to be more generous with extras on express orders. *We do not fill plant orders of less than 25c by mail.* A dozen may consist of more than one kind of plant at same price. In club orders each one's lot is marked separate and liberal extras given to the one making up the club.

Of miscellaneous plants at dozen rates, select for each dollar to value \$1.10.

We warrant to fill all orders received. If seeds or plants fail to reach you in due season, let us know at once. Money at our risk if you send express order, postoffice order or bank draft on

Chicago, Milwaukee, St. Paul or Minneapolis bank, or any of the large cities. Please do not send your personal check. *Banks refuse them.* Small amounts in silver have so far proved safe. Stamps if sent should not be of larger than two cent denomination, one cent stamps preferred. Letters containing bankbills should be registered. Make orders plain and separate from correspondence.

And don't forget to sign your name. Send all orders to

WILLIAM TOOLE,

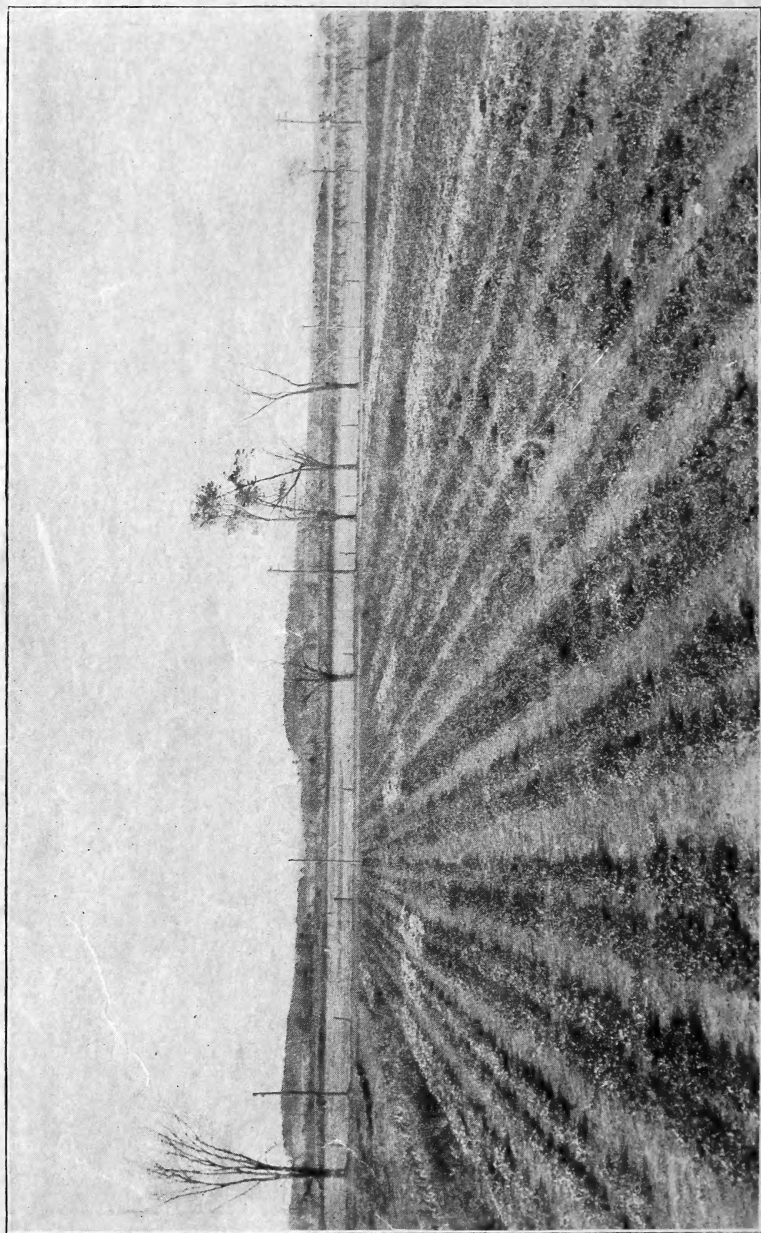
Pansy Specialist,

1905

Pansy Heights

BARABOO, WIS.

Join the Wisconsin State Horticultural Society and help in its good work. Annual membership \$1.00. Life membership \$5.00. Write to the secretary, F. CRANFIELD,
Madison, Wis.



Toole's Pansy Field - Oct. 23, 1904.